

Title (en)  
Nonwoven polymeric fiber mat composites and method

Title (de)  
Polymerfaservliesmatte und Verfahren zu deren Herstellung

Title (fr)  
Mats non-tissés de fibres polymères et leur procédé de fabrication

Publication  
**EP 1710337 B1 20110119 (EN)**

Application  
**EP 06007367 A 20060407**

Priority  
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• US 37653806 A 20060315

Abstract (en)  
[origin: EP1710337A1] A flexible nonwoven mat of polymeric fibers is liquid water transmission resistant and is particularly well suited for use as a prefabricated building construction underlayment. The polymeric fibers may be standard polymeric fibers or sheathed polymeric fibers that have fiber sheaths with a lower softening point temperature than the softening point temperature of the fiber cores. Preferably, the polymeric fibers are spunbond fibers and are bonded together through the application of heat and pressure. Where the fibers are sheathed fibers, interstices of the nonwoven mat are at least partially filled by a portion of the polymeric material of the sheaths that is dispersed into the interstices to reduce the porosity of the mat. In certain embodiments, the polymeric fibers on the top major surface of the mat are coated with a hydrophobic binder coating material, which is overlaid with a water repellant coating material, such as a filled asphalt, modified bitumen, or a non-asphaltic polymeric film, to increase the liquid water impermeability and enhance other physical properties of the mat.

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Cited by  
CN103370465A; EP3243975A1; GB2499076A; GB2499076B; EP3993999A4; US11987985B2; US9085838B2; WO2021216168A1; EP3243975B1

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